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NCEP Central Computer System

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Topics

- CCS Phase II configuration
- CCS upgrade schedule
- Product delivery statistics
- System utilization
- Implementation scientific review process

Central Computer System

(Operations & Backup)

- Two Identical System (Fairmont & G'Burg)
 - ❖ 160 Power-4 Regatta H+ nodes
 - 8 Processors per nodes (1.7 GHz clock speed)
 - ❖ 1280 total processors
 - ❖ 16 GB memory per node
 - ❖ 22.5 TB disk storage
 - ❖ 1 PB tape storage
 - ❖ Performance Guarantee **3.3X Phase I**

Central Computer System

(Research & Development)

- Two Identical Systems (G'Burg)
 - ❖ 22 Power-4 Regatta H nodes
 - 32 processors per node (1.3 GHz Clock Speed)
 - 8 – 4 CPU LPAR's
- 704 Processors
 - ❖ 704 GBytes Memory
 - ❖ 21 TB Disk Storage
 - ❖ 1.250 PB Tape Storage
 - ❖ Performance Guarantee **2.5x IBM SP**

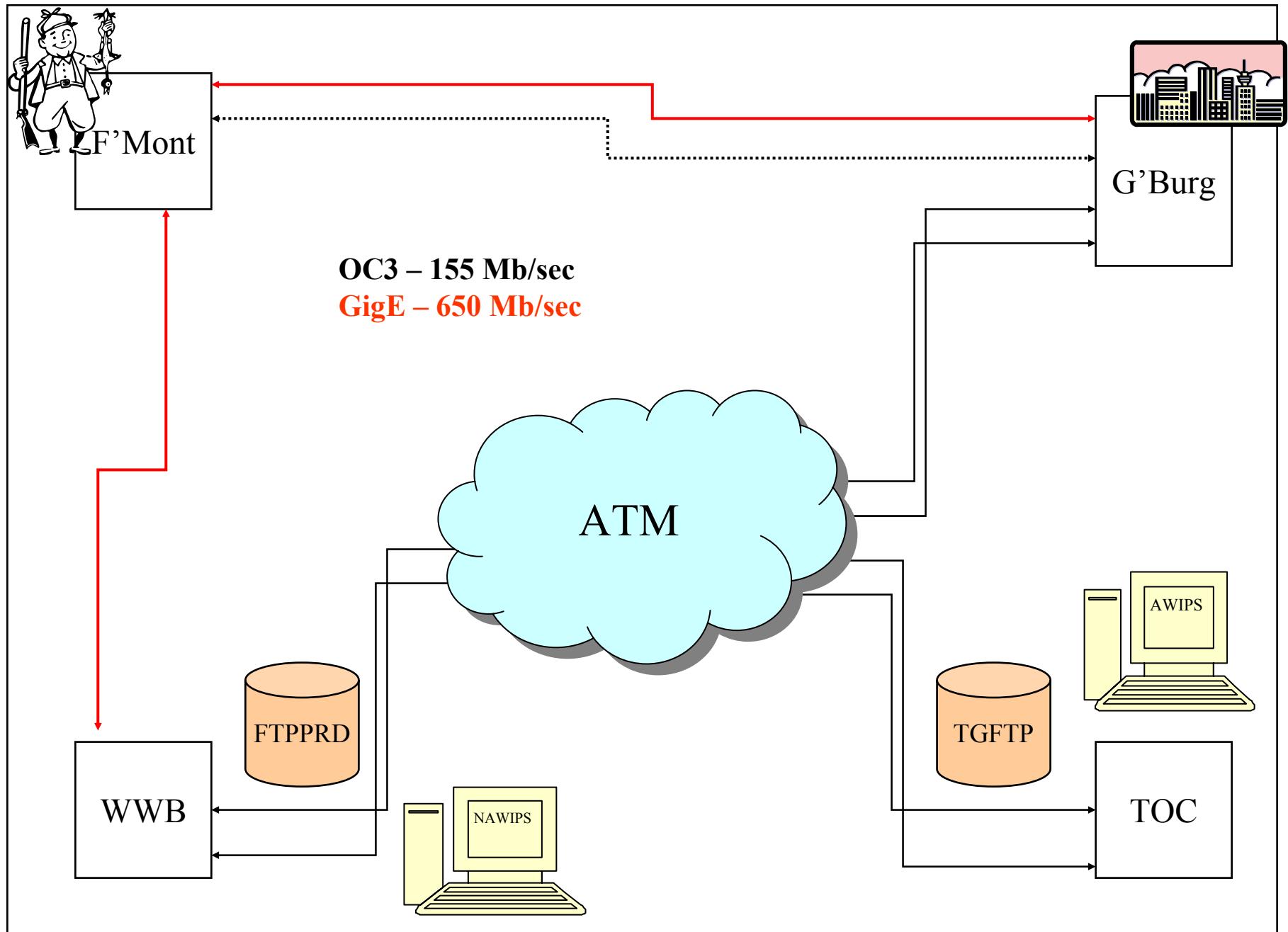
CCS Upgrade Schedule

- Sign 5-yr contract extension – December 05
 - ❖ Operational & Backup systems only
 - ❖ R&D system moved to NOAA-wide R&D contract
 - Award expected December 05
- Installation Fairmont system – July 06
- Remove Frost &/or Snow – September 06
- Installation of G'Burg system – October 06
- Systems operational 2Q FY07

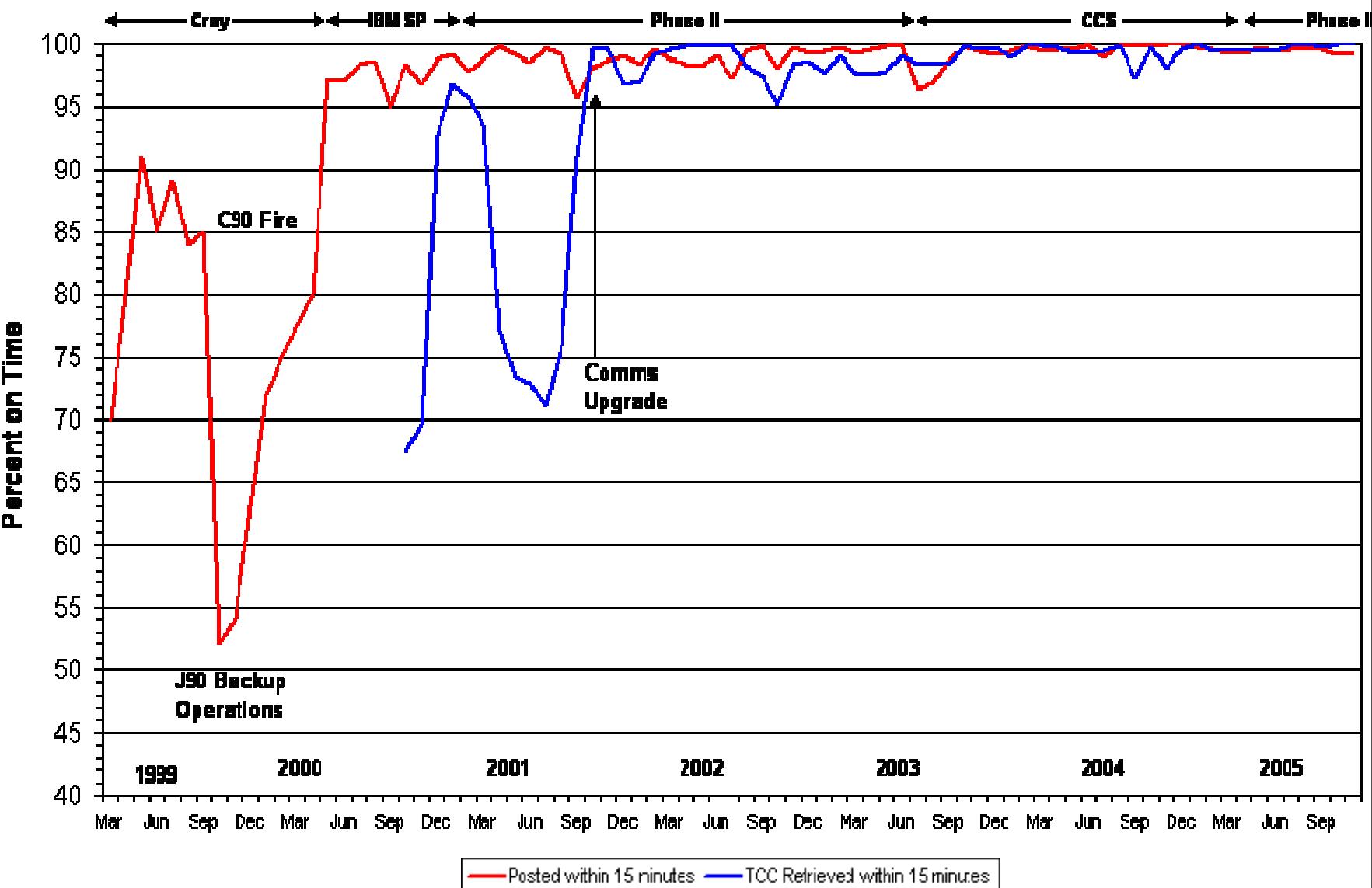
CCS Upgrade Schedule

(impact on implementations)

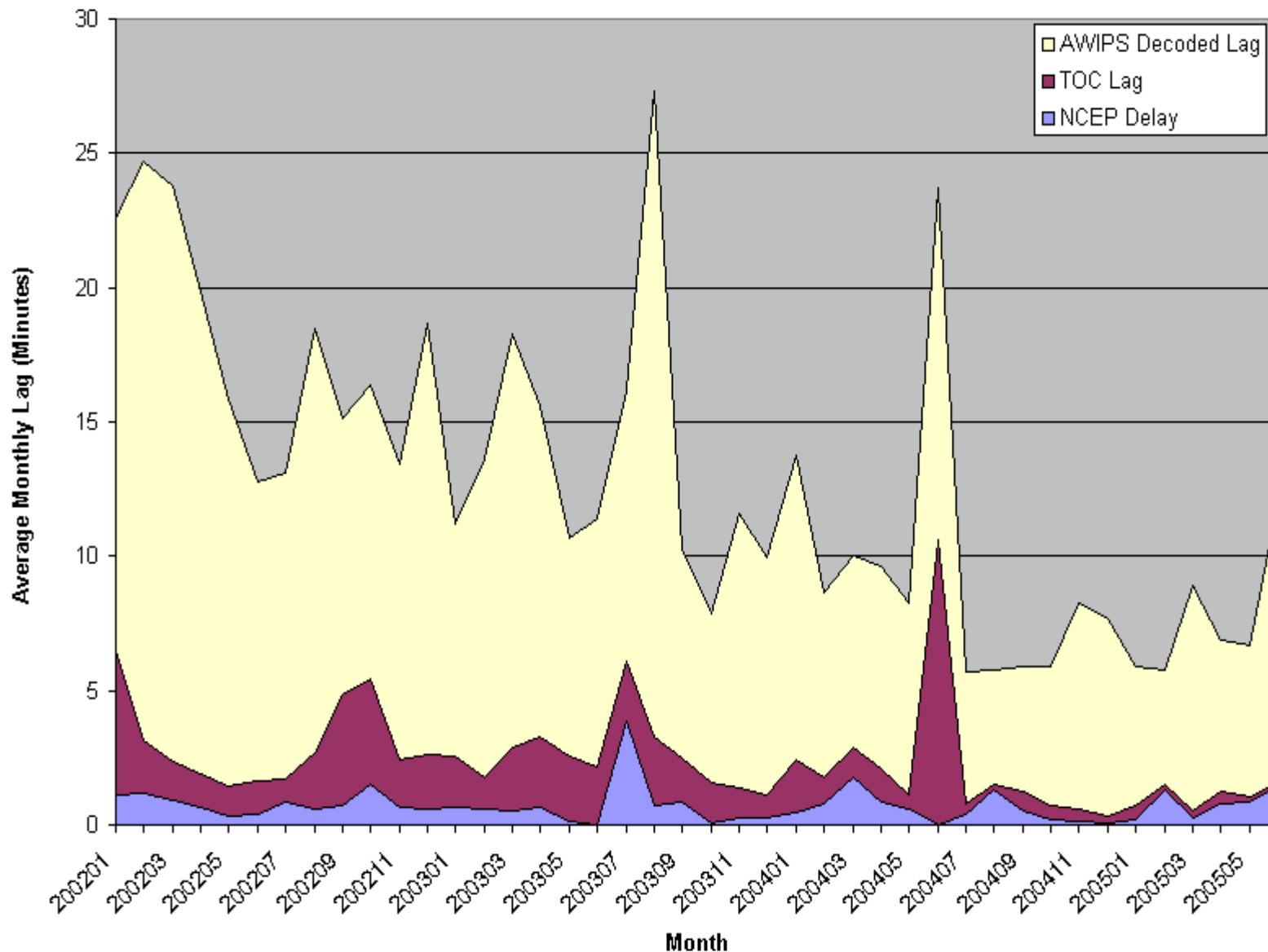
- Moratorium on Production Suite changes will begin in August 06 and end when systems become operational
 - ❖ As with CCS phase II upgrade some pending changes may be implemented on the new systems during acceptance testing, so they will become operational as soon as systems are deemed ready for operations
 - Frozen operations must be run in parallel for a short period of time to ensure reproducibility



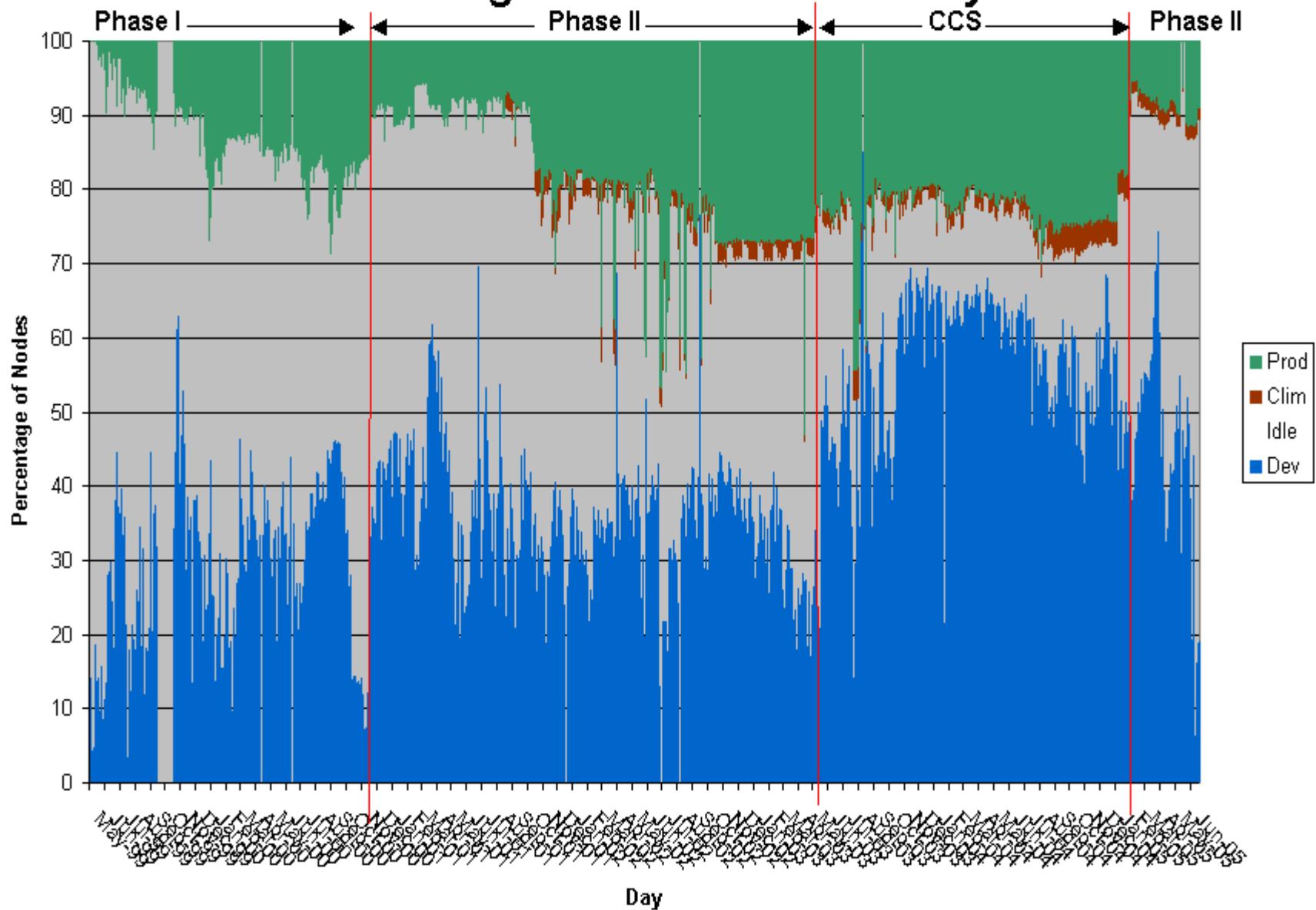
Product Generation Summary



End to End Lag Times Trend



Average Nodes Used Per Day



Scientific Evaluation Process

- Expanded participation
 - ❖ NCEP Centers
 - ❖ NWS Regions
 - ❖ University Community
 - ❖ Private Sector
- Mailing list for notifications of upcoming major changes

<https://listsrv.ncep.noaa.gov/mailman/listinfo/ncep.list.modelevalinfo>

Scientific Evaluation Process

- NCEP Centers are required to respond to invitations to participate
 - ❖ Response can be non participation
- All others are encouraged
 - ❖ If other groups are going to participate they are asked to submit an intent to participate form
 - Allows NCO to track & disseminate info to participants
- Mechanism to disseminate test products is a work in progress
 - ❖ Intent is to provide test data in a format that is usable by as large a segment of the community as possible